

**Northwest Power and Conservation Council
Demand Response Advisory Committee
October 27, 2020**

Tina Jayaweera, NWPCC, began the meeting at 10:00. Chad Madron, NPWCC, reviewed how to best engage using the Go-to-Webinar platform. Jayaweera called for introductions and announced that early findings will be presented at the December DRAC meeting.

Jeff Harris, NEEA, asked if John Ollis, NWPCC, could comment about integrating DR resources into systems analysis work and if anything from this group could help that work go more smoothly. Ollis explained that staff includes DR potential in regional resource strategy work but there is less information available for other markets like CA and the desert SW. He further explained that the AURORA model doesn't have a DR option, but does have four-hour storage. Ollis said the differences in cost between the two would be explained in the narrative.

Ollis asked Harris if his question was geared to finding a WECC-wide clearing house for DR information. Harris said yes. Ollis thanked him and said he would take any information to improve analysis for this Plan or the next.

Power Planning under the Northwest Power Act of 1980

John Shurts, NWPCC

Shurts provided a Power Planning 101 presentation, outlining the history on the development of the Northwest Power Act, required elements for the power plan and how DR fits within the Act.

Gurvinder Singh, PSE, wrote that the terms "reliable and available" have been adopted into WA statutes in reference to all-cost effective conservation. He asked if there is some place in the Act where the term "reliable" is further defined. Shurts moved to [Slide 9] to show that Cost-effective means that a measure or resource must be reliable and available. Shurts said these terms are not defined in the Act or in any of the legislative history.

Shurts stated that "available" seems obvious as something that is commercially developed. He said "reliable" has been applied to mean a measure that can reliably serve particular system needs. Shurts offered to follow up offline if anyone has further questions.

Nicolas Garcia, WPUDA, asked what "reduce" means in the phrase "reduce or meet the Administrator's obligations" on [Slide 10.] Shurts explained that the point is to avoid the higher-cost resource future, like reducing load via conservation versus building new resources.

Tom Eckhardt, UCONS, said this wasn't just to address load growth but an acknowledgment that older resources would have to be replaced. Shurts agreed.

Ahlmahz Negash, Tacoma Power, asked where energy storage fits within priority categories [Slide 12.] Shurts explained that energy storage wasn't considered at the time the Act was written and is still unclear. He offered to do some research and re-connect offline. After the meeting, Shurts sent the following explanation to staff, which staff then circulated to the DRAC via email:

The definition of "resource" in the Act includes "electric power, including the actual or planned electric power capability of generating facilities." The point of a storage device, be it a battery or a pumped storage reservoir, is to provide "electric power." It's a resource under the Act, essentially a form of generating resource. And the priority in the Act that really matters is the "cost-effective" one, so storage – alone or paired with another generating resource, such as solar – should be chosen if it's cost-effective in comparison to other resources in meeting whatever the need is.

How you would fit "storage" into the other statement of priorities (which was the precise question) – that is, the hierarchy of favored types, from conservation, to renewables, and down to "other" – is less obvious, and might depend on whether and how the storage is paired with another generating resource. But it also seems a categorization that is mostly irrelevant, as outside of the 110% bump for conservation, resources in these categories are chosen for the plan's resource strategy largely on the basis of whether they are cost-effective, not because of where the resource type sits on the list of priorities categories.

DISCUSSION

Garcia asked if DR is more of a generating resource, conservation resource or a third, not-yet-defined category. Shurts went back to [Slide 8] and said it's clearly not generation but might be conservation. He then stated that some contract-based DR is more of a reserve as it has the right to interrupt, curtail, or otherwise withdraw. Shurts said DR doesn't perfectly fit in the Act as written but does fit functionally in conservation.

Garcia noted that conservation must be acquired first and asked if DR is part of that cohort of measures. Shurts stated that the priority section has two pieces [Slide 6] and "cost-effective" is first. He said the Seventh Plan showed that DR is a more cost-effective way to acquire capacity than building gas plants. Jayaweera added that there have been conversations with the CRAC, DRAC during a SIF on how to best deal with overlapping resources like water heaters. Because of those conversations EE is always prioritized in portfolio analysis, according to Jayaweera.

Shurts then pointed to Act language around acquiring cost-effective reserves, noting that DR may fit there.

Zeecha Van Hoose, Clark PUD, asked if conservation and resources have different values within the Power Plan from a cost-effectiveness standpoint. Shurts said, from a legal standpoint, compared measures must be reliable and available at the time of need. Jayaweera added that the Act gives a 10% credit for conservation.

Harris stated that Heat Pump Water Heaters are prioritized in the Act as efficiency but also have a DR functionality that can reduce or increase load to make the entire system more efficient. He asked if there is a net determination factor to keep it an EE priority resource even though it may increase loads at times to absorb abundant, mid-day renewable power. Shurts said there hasn't been any effort to parse out resources at that level. He agreed that sophisticated, load shifting technology works more like a conservation resource that provides capacity value and less like a reserve where you pay to curtail.

Eckhart recalled early DRAC work that defined DR as best as possible around the wording of the Act. He wondered if more work would provide further clarify. Shurts said there has already been work that advises focusing on the function of DR and recognizes definitional issues.

Fred Heutte, NW Energy Coalition, asked if storage and DR is a measure if they are not defined as a resource. Shurts called that a drafting inconsistency and offered to talk more offline.

2021 Power Plan Content Outline

Tina Jayaweera, NWPCC

Jayaweera provided a high-level presentation on the organization for the 2021 Power Plan, noting it will look differently than the 7th Plan. Jayaweera explained that the Plan document will be concise addressing the statutorily required elements, with the supporting technical materials presented using the web as the native format.

BREAK

Diversity, Equity, & Inclusion: How does it fit in the 2021 Plan

Tina Jayaweera, NWPCC

Jayaweera provided a brief presentation explaining why we are discussing DEI and the 2021 Power Plan, noting how DEI considerations fit within the Northwest Power Act and DEI in prior Council analysis before opening the floor for discussion.

Discussion

Tanya Barham, Community Energy Labs, commented that DEI is an emerging area, but reminded the group that DR is mostly a technical product that allows for some bottom-up, DEI work. She pointed to work she is doing with Avista that looks beyond demographic slices and is instead doing bottom-up, human-centered design and load clustering. Barham stated that this approach allows more granular learning about usage patterns, preferences and behaviors.

Barham acknowledged that a top-down approach makes sense for a system, but argued that a bottom-up approach is needed to do DR well and have a good fit between technologies and pricing.

Heutte stated that NW Energy Coalition has been focusing on DEI for many years and is striving toward evolving their approach. He stated that power planning is a high-level process, while DEI concerns enter in at the policy or program level. Heutte said that DR requires active, ongoing engagement by the customer which is very different than the one-time cost of EE. Because of this, Heutte said DEI should mean that all customers can participate, have agency and control and are confident that they will see real benefits. He regretted that, because of program design, some segments of the population will be overlooked or bypassed.

Heutte pointed to NWEC's comments to the State of Oregon about distribution system planning, noting the importance of engagement with low income, diverse and BIPOC communities.

Garcia pointed to the differences in customers between utilities and voiced concern about the Council's regional approach. He liked the idea of a bottom-up approach, saying it's important to understand how DEI effects individuals. Garcia said that effect will vary by utility and location and strongly urged the Council to consider what Equity looks like across utilities.

Jayaweera wondered what, if anything, should be included in the Plan or if it's better addressed utility by utility and implementor by implementor. She asked Heutte how or if he sees this in the Plan. Heutte stated that the Council already looked at hard-to-reach markets, particularly rural and low-income. He called this a good start, acknowledging that the Council could never get to a granular, individual-utility level. Heutte did think that there was a wealth of socio-demographically diverse data to explore to get a finer-grain assessment.

Barham agreed that the Council's is not in a position to talk about execution but re-stated that execution really matters for cost effectiveness. She said she is looking at supplier diversity, wondering if we are using the same thinking to solve the problem that created it.

Barham wondered what systematic requirements could be put in place to ensure a wide variety of customers are meaningfully engaged in the design, implementation, scale and acquisition of the resource.

Ahlmahz Negash, Tacoma Power, spoke of considering equity metrics and indicators in Tacoma's IRP process. She called for the Council to continue that dialogue and would like to see some analysis or summary of different ways to address the issue. Negash concluded that WA is working on guidance as part of CETA.

Sarah Vorpahl, WA dept of Commerce, explained that she is focusing a lot of attention on Equity as it relates to CETA. She called this a new area of conversation, but not outside the utility wheelhouse. Vorpahl offered to send a link to Dept of Commerce guidance on equity.

Vorpahl said she divides the issue into structural, procedural and distributional equity. She said structural equity, defined as big concepts like institutionalized racism and sexism, is important but not a useful starting point for this conversation. Vorpahl called distributional equity an

important part of CETA and asks that utilities examine the impacts of their decisions on vulnerable populations and highly-impacted communities.

Vorpahl thought geographic impacts should be considered in DR decisions, which is slightly different than EE considerations.

Vorpahl then addressed procedural equity, which looks at best ways to reach out to newly-named populations and understand how to incorporate their inputs in the planning process. She highlighted work Snohomish PUD did in concert with local organizations to brainstorm sensitivities and scenarios for their IRP.

Vorpahl looked forward to Council support of this work. She hoped staff would find opportunities to lean on Non-Energy Benefits and offer support on planning. She envisioned this support as a definition of best practices around metrics and indicators that can be used for distributional equity.

Jennifer Finnigan, SCL, noted that her utility is trying to incorporate more community engagement in their program planning process. She said this means more outreach to low-income and underserved areas, particularly around transportation electrification. Finnigan thought the Council's well-defined public processes would be a good model to use when figuring out the who should be engaged and where and how that engagement takes place. She also said it's a good way to find out who is being left out of the conversation.

Heutte followed up with a comment on CETA saying Avista recently presented a socio-economic assessment of their system. He called this a good way to bring new data and analysis into their process.

Jayaweera thanked everyone for their input and asked for any other questions, comments or links be sent to her via email. She ended the meeting at 12:30.

Comments from the Questions panel that were not discussed:

Laura McCarty, Flex Charging, asked, "Shouldn't we be looking more toward Demand Flexibility vs. Demand Response - i.e., day-to-day generation following - the way we used to think about load following."

John Ollis responded, "Laura, I agree we should be considering not just following load but also generation (per the proliferation of resources producing energy without stored fuel like wind and solar). However, in terms of the NW system from a regional perspective, demand response versus demand flexibility (other than local utility transmission/distributions issues) is a little bit interchangeable due to the inherent flexibility in the hydro system. As that flexibility gets used up, we will probably need to focus more on the flexibility bit. That being said in a broad sense, I agree."

McCarty then stated, “Thanks. It just seems that DR is a response to a problem and DF means we have less problems as we schedule each day's load according to that day's forecasted gen. And if we do that well, then DR becomes more of an outlier vs. a SOP for dealing w/variable gen.”

Ollis responded with, “Agreed. In the Council's definition of demand response, we tried to incorporate that as a possibility: Demand response is a non-persistent intentional change in net electricity usage by end-use customers from normal consumptive patterns in response to a request on behalf of, or by, a power and/or distribution/transmission system operator. This change is driven by an agreement, potentially financial, or tariff between two or more participating parties.”

Attendees via Go-to-Webinar

Tina Jayaweera	NWPCC
John Ollis	NWPCC
John Shurts	NWPCC
Malcolm Ainspan	NRG
Tanya Barham	Community Energy Labs
Nick Bengtson	Energy Hub
Leann Bleakney	NWPCC
Kacia Brockman	OR PUC
Frank Brown	BPA
Aaron Bush	PPC
Gillian Charles	NWPCC
Lindsey Davidge	University of WA
Tom Eckhart	UCONS
Jennifer Finnigan	SCL
Kyle Frankiewicz	WA UTC
Suzanne Frew	Snohomish PUD
Nicolas Garcia	WPUDA
Debyani Ghosh	Guidehouse
Andrea Goodwin	NWPCC
Leona Haley	Avista
Lee Hall	BPA
Jeff Harris	NEEA
Fred Heutte	NW Energy Coalition
Chad Ihrig	Franklin Energy
Mark Jerome	CLEAResult
Don Jones, Jr.	PacifiCorp
Ted Light	Lighthouse Energy
Jennifer Light	NWPCC
Garrett Martin	Oregon PUC
Robin Maslowski	Guidehouse

Shelly-Ann Maye	OR PUC
Laura McCarty	Flexcharging
Kerry Meade	NEEC
Corinne Milinovich	DV Claw
Tomás Morrissey	PNUCC
Quentin Nesbitt	Idaho Power
Tim Nies	Energy Northwest
Elizabeth Osborne	NWPCC
Patrick Oshie	NWPCC
Elaine Prause	PacifCorp
Scott Reeves	Cadmus Group
Bill Saporito	Umatilla Electric
Blake Scherer	Benton PUD
Gurvinder Singh	PSE
Kevin Smit	NWPCC
Jennifer Snyder	WA UTC
Zeecha Van Hoose	Clark PUD
Sarah Vorpahl	WA Dept of Commerce
Kitty Wang	Energy Solution
Amy Wheelless	NW Energy Coalition
Bryce Yonker	Gridfoward
Brian Dekiep	NWPCC
Ahlmahz Negash	Tacoma Power
Will Price	EWEB
Jessica Aiona	BPA
JP Batmale	Oregon
Dhruv Bhatnagar	PNNL
Lily Hahn	University of Washington
Josh Keeling	Cadeo Group
Chad Madtest	
David Paoella	Clean Transition
Hayden Reeve	PNNL
Deborah Reynolds	WA UTC
Nick Sayen	OR
Peter Sayen	BPA
Timothy Treadwell	PGE
Cindy Wright	SCL